TRIP Report: Wyoming Transportation Funding Shortfall Will Lead To Increasing Road And Bridge Deterioration, Increased Costs To Drivers And Lost Economic Development Opportunities

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At a time when Wyoming faces an annual transportation funding shortfall of $332 million to improve its transportation system, one-fifth of the state’s major roads are deteriorated, nearly a quarter of bridges are in need of repair or replacement, and the state’s traffic fatality rate is among the highest in the nation. Unless the state can increase transportation investment, conditions are projected to worsen significantly in the future. Increased investment in transportation improvements could improve road and bridge conditions, boost safety, and support long-term economic growth in Wyoming, according to a new report released today by TRIP, a Washington, DC based national transportation organization. The TRIP report, “Wyoming Transportation by the Numbers: Meeting the State’s Need for Safe and Efficient Mobility,” provides data on key transportation facts and figures in the state:

<table>
<thead>
<tr>
<th>Cost</th>
<th>Description</th>
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<tr>
<td>$109.5 million</td>
<td>Maintaining Wyoming’s transportation system in its current condition would require an additional investment of $109.5 million annually over the next decade. Improving the state’s transportation system and making needed safety and capacity enhancements would require an additional $332 million each year for the next decade.</td>
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<td>To keep pace with the transportation needs of the state’s rapidly growing energy extraction sector, WYDOT estimates that at least $250 million in additional transportation projects are needed to improve and expand the state’s roads, highways and bridges to accommodate increased traffic.</td>
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<tr>
<td>34%</td>
<td>Under current funding, the number of bridges in need of significant repair or reconstruction in Wyoming is expected to increase 46 percent from 396 currently to 579 by 2023.</td>
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<td>793</td>
<td>Between 2006 and 2010, a total of 793 people were killed in traffic crashes in Wyoming, an average of 159 fatalities per year.</td>
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<td>5m</td>
<td>Wyoming’s traffic fatality rate of 1.62 fatalities per 100 million vehicle miles of travel is the fifth highest in the nation.</td>
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<td>$187 million</td>
<td>TRIP estimates that additional vehicle operating costs borne by Wyoming motorists annually as a result of poor road conditions is $187 million statewide, or $461 per motorist.</td>
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<td>64%</td>
<td>Vehicle miles of travel (VMT) in Wyoming increased 64 percent from 9.6 billion VMT in 1990 to 9.6 billion VMT in 2010. By 2030, VMT in Wyoming is projected to increase an additional 40 percent.</td>
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<td>216,496</td>
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According to the TRIP report, the state faces an annual transportation-funding shortfall of $109.5 million to improve its transportation system in its current condition. In order to improve Wyoming’s roads and bridges and make needed safety and capacity enhancements, the state would need to spend an additional $332 million each year for the next decade. Projects needed to accommodate the state’s rapidly growing energy extraction sector will total at least $250 million in additional funds.

“Roads are the lifeblood of Wyoming’s economy. The TRIP report confirms what many in our state are coming to understand: the challenges of maintaining Wyoming’s transportation system are significant and more work needs to be done to improve the state’s roads,” said Jonathan Downing, CEO of the Wyoming Contractors Association. 

Because of this lack of transportation funding, road and bridge conditions are projected to worsen significantly in the future. Currently, 21 percent of miles of roadway are in poor condition. However, under current funding conditions, 34 percent of miles of roadway will be in poor condition by 2023. Bridge conditions will also deteriorate without additional funding. A total of 23 percent of the state’s bridges are currently structurally deficient or functionally obsolete. The number of bridges in need of significant repair or reconstruction will increase by 46 percent by 2023 under current funding conditions.

Driving on rough roads costs Wyoming motorists an average of $461 each annually in extra vehicle operating costs – a total of $187 million statewide. Costs include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear. Wyoming’s traffic fatality rate of 1.62 fatalities per 100 million vehicle miles of travel (VMT) is the fifth highest in the nation and 46 percent higher than the national average of 1.11 fatalities per 100 million VMT. Wyoming’s traffic fatality rate on rural, non-Interstate routes is more than double that on all other roads and highways in the state. Roadway features are likely a contributing factor in approximately one-third...
of all fatal and serious traffic crashes. Traffic crashes in Wyoming claimed the lives of 793 people between 2006 and 2010. The traffic fatality rate in 2010 on Wyoming’s non-Interstate rural roads was 2.12 traffic fatalities per 100 million vehicle miles of travel; nearly double the 1.19 traffic fatalities per 100 million vehicle miles of travel on all other roads and highways in the state. Where appropriate, highway improvements can reduce traffic fatalities and crashes while improving traffic flow to help relieve congestion.

“Three key transportation numbers in Wyoming add up to trouble for the state’s residents in terms of deteriorated roads and bridges, reduced traffic safety and constrained economic development,” said Will Wilkins, executive director of TRIP. “Improving road and bridge conditions, improving traffic safety and providing a transportation system that will support economic development in Wyoming will require a significant boost in funding for road, highway and bridge improvements.”

Executive Summary

Wyoming’s extensive system of roads, highways and bridges provides the state’s residents, visitors and businesses with a high level of mobility. This transportation system forms the backbone that supports the Equality State’s economy. Wyoming’s surface transportation system enables the state’s residents and visitors to travel to work and school, visit family and friends, and frequent tourist and recreation attractions while providing its businesses with reliable access to customers, materials, suppliers and employees. As Wyoming looks to achieve further economic growth and take advantage of its booming energy sector, the state will need to maintain and modernize its roads, highways and bridges by improving the physical condition of its transportation network and enhancing the system’s ability to provide efficient and reliable mobility for motorists and businesses. Making needed improvements to Wyoming’s roads, highways and bridges could also provide a significant boost to the state’s economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

Meeting Wyoming’s need to modernize and maintain its system of roads, highways and bridges will require a significant boost in local, state and federal funding.

Twenty-three percent of bridges in Wyoming show significant deterioration or do not meet current design standards. This includes all bridges that are 20 feet or more in length. Due to a lack of adequate transportation funding, the number of bridges that are deficient or in need of significant repair or reconstruction is expected to increase significantly in the coming years.

Executive Summary

Wyoming faces a significant shortfall in the amount of funding needed just to maintain the state’s transportation system in its current condition over the next decade. Because of a lack of available funding, the condition of Wyoming’s roads and bridges will decline over the next decade and the state will struggle to improve and expand the current transportation system to a level that will adequately accommodate the burgeoning energy extraction sector.

- According to the Wyoming Department of Transportation (WYDOT), just maintaining the state’s transportation system in its current condition would require an additional $109.5 million in transportation funding each year through 2023.
- In order to improve Wyoming’s transportation system and make needed safety and capacity enhancements, WYDOT estimates that an additional $332 million in transportation funding would be needed each year through 2023.
- To keep pace with the transportation needs of the state’s rapidly growing energy extraction sector, WYDOT estimates that at least $250 million in additional transportation projects are needed to improve and expand the state’s roads, highways and bridges to accommodate increased traffic.
- In order to aid economic development in the state, WYDOT estimates that approximately 409 centerlane miles of new roads will need to be added through 2023. However, under current funding, only 13 centerlane miles of new roads to aid economic development are scheduled to be completed through 2023.
- A 2007 analysis by the Federal Highway Administration found that every $1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.

Population and economic growth in Wyoming have resulted in increased demands on the state’s major roads and highways, leading to increased wear and tear on the transportation system.

- Wyoming’s population reached 568,000 in 2010, a 25 percent increase since 1990, when the state’s population was approximately 454,000. Wyoming has 216,486 licensed drivers.
- Vehicle miles traveled (VMT) in Wyoming increased by 64 percent from 1990 to 2010 – jumping from 5.8 billion VMT in 1990 to 9.6 billion VMT in 2010.
- By 2030, vehicle travel in Wyoming is projected to increase by another 40 percent.
- From 1990 to 2010, Wyoming’s gross domestic product, a measure of the state’s economic output, increased by 76 percent, when adjusted for inflation.

Twenty-one percent of all miles of roads and highways in Wyoming have pavement surfaces in poor condition, providing a rough ride and costing motorists in the form of additional vehicle operating costs. Pavement conditions are expected to deteriorate in the future due to a lack of available transportation funding.

- According to the Wyoming Department of Transportation, 21 percent of miles of pavement are in poor condition, while an additional 24 percent are rated in fair condition. Twenty-six percent of lane miles of Wyoming highways and roadways are rated in good condition and the remaining 29 percent are rated in excellent condition.
- Due to a lack of available transportation funding, the number of miles of roadway in poor condition is projected to increase from 21 percent in 2012 to 34 percent in poor condition in 2023.
- The condition of the Wyoming’s Interstate system is projected to deteriorate in the coming years due to a lack of available transportation funding. The number of Interstate miles in poor condition is expected to more than double in the next decade, rising from six percent of Interstate miles in poor condition in 2012 to 14 percent in poor condition in 2023.
- Roads rated in poor condition may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced, but often are too deteriorated and must be reconstructed.
- Driving on rough roads costs the average Wyoming motorist an average of $461 annually in extra vehicle operating costs – a total of $187 million statewide. Costs include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear.

Twenty-three percent of bridges in Wyoming show significant deterioration or do not meet current design standards. This includes all bridges that are 20 feet or more in length. Due to a lack of adequate transportation funding, the number of bridges that are deficient or in need of significant repair or reconstruction is expected to increase significantly in the coming years.

- Fourteen percent of Wyoming’s bridges are structurally deficient. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting or redirecting large vehicles, including commercial trucks and emergency services vehicles.

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Nine percent of Wyoming’s bridges are functionally obsolete. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment.

By 2023, WYDOT projects that a total of 31 percent of bridges will be structurally deficient or functionally obsolete due to a lack of available transportation funding. WYDOT estimates that in 2023, approximately 22 percent of bridges will be structurally deficient and nine percent will be functionally obsolete.

Under current funding constraints, the number of bridges in need of significant repair or reconstruction in Wyoming is expected to increase 46 percent from 396 bridges currently in need of significant repair or reconstruction to 579 by 2013.

Wyoming’s traffic fatality rate on rural, non-Interstate routes is more than double that on all other roads and highways in the state. Improving safety features on Wyoming’s roads and highways would likely result in a decrease in traffic fatalities and serious crashes in the state. Roadway features are likely a contributing factor in approximately one-third of all fatal and serious traffic crashes.

- Between 2006 and 2010, a total of 793 people were killed in traffic crashes in Wyoming, an average of 159 fatalities per year.
- Wyoming’s overall traffic fatality rate of 1.62 fatalities per 100 million vehicle miles of travel in 2010 is the fifth highest fatality rate in the nation and 46 percent higher than the national average of 1.11 fatalities per 100 million vehicle miles of travel.
- The fatality rate on Wyoming’s rural non-Interstate roads was 2.12 fatalities per 100 million vehicle miles of travel in 2010, significantly higher than the 1.19 fatality rate in 2010 on all other roads and highways in the state.
- The number of fatalities occurring on the state’s non-Interstate rural roads is disproportionately higher than the amount of vehicle travel on these roads. While 46 percent of all vehicle travel in the state takes place on Wyoming’s non-Interstate rural roads, 61 percent of fatalities in the state occurred on non-Interstate rural roads.
- Several factors are associated with vehicle crashes that result in fatalities, including driver behavior, vehicle characteristics and roadway features. It is estimated that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes.
- Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design.
- Where appropriate, highway improvements can reduce traffic fatalities and crashes while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; improved lighting; adding rumble strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.
- Investments in rural traffic safety have been found to result in significant reductions in serious traffic crashes. A 2012 report by the Texas Transportation Institute (TTI) found that improvements completed recently by the Texas Department of Transportation that widened lanes, improved shoulders and made other safety improvements on 1,159 miles of rural state roadways resulted in 133 fewer fatalities on these roads in the first three years after the improvements were completed (as compared to the three years prior). TTI estimates that the improvements on these roads are likely to save 880 lives over the next 20 years.

The efficiency of Wyoming’s transportation system, particularly its highways, is critical to the health of the state’s economy. Businesses are increasingly reliant on an efficient and reliable transportation system to move products and services. A key component in business efficiency and success is the level and ease of access to customers, markets, materials and workers.

- Annually, $23.8 billion in goods are shipped from sites in Wyoming and another $27.7 billion in goods are shipped to sites in Wyoming, mostly by truck.
- Fifty-three percent of the goods shipped annually from sites in Wyoming are carried by trucks and another seven percent are carried by courier services or multiple mode deliveries, which include trucking.
- Businesses have responded to improved communications and greater competition by moving away from a push-style distribution system, which relies on low-cost movement of bulk commodities and large-scale warehousing, to a pull-style distribution system, which relies on smaller, more strategic and time-sensitive movement of goods.
- Increasingly, companies are looking at the quality of a region’s transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system.
- Site Selection magazine’s 2010 survey of corporate real estate executives found that transportation infrastructure was the third most important selection factor in site location decisions, behind only work force skills and state and local taxes.

Sources of information for this report include the Wyoming Department of Transportation (WYDOT), the Federal Highway Administration (FHWA), the Bureau of Transportation Statistics (BTS), the U.S. Census Bureau, the Texas Transportation Institute (TTI) and the National Highway Traffic Safety Administration (NHTSA).